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IMPROVING OUTSOURCING FRAMEWORK BY INTEGRATING WITH LEAN

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Abstract: Outsourcing has become a vital strategic element in all kinds of organisations ranging from manufacturing to the service industry. Due to increasing trends a large number of organisations have adopted or are in a process of adopting outsourcing. Currently organisations practising outsourcing have a financial advantage over others. However, in due course, many others will join the race and may cause the organisations practicing outsourcing to lose their competitive advantage. The organisations, however, prepared to practice outsourcing effectively by continuous improvement will achieve enhanced performance. An effective way to incorporate a continuous improvement strategy into the outsourcing process is to integrate it with the lean system philosophy. This, however, is a complicated task. Over one hundred management tools have been listed that must be mastered to achieve the desired results (Bicheno, 2004). Despite this, different organisations are adopting various outsourcing models to acquire competitiveness (Brannemo, 2006). The selection of a suitable lean tool requires in depth understanding of the outsourcing process and strategies, by applying the lean philosophy to outsourcing, the final product cost can be reduced and the gap in the provider-consumer chain can be minimised by developing a continuous flow. In order to successfully implementing the Lean Outsourcing model, workforce training is essential. A survey (Fan, 2000) shows that organisations are outsourcing rather than focusing on price and other issues of the business. Instead of continuously improving the outsourcing programme by conventional means, it is advisable to develop and implement an integrated Lean Outsourcing model, so that continuous improvement becomes a part of the strategy.

Realizing the importance of improving the outsourcing process, an attempt has been made in this paper to develop a model for integrating it with the Lean system. The objective of this paper is to present how the continuous improvement strategy can be incorporated into the outsourcing process by integrating it with the lean system. Furthermore, the aim is to analyse, how effectively this can be done to achieve an improved outsourcing model. The Lean Outsourcing model can be used as a base for building a continuously improving competitive sourcing decision model.

1. Introduction:

Comprehensive Lean system philosophy encompasses continuous improvement, evolution along with revolution to meet changing market requirements to satisfy the consumer. Lean employs a range of tools and techniques that need to be selected appropriately and applied within the philosophical boundaries of the model. The aim of the Lean philosophy is to create a continuously improving system with a choreographic rhythm, so there is no additional effort needed to change the system

for improvement. It has been argued (Womack et al., 2005) that Outsourcing is against the philosophy of the Lean system as outsourcing widens the consumer-provider chain gap. The Lean system emphasises that the product cycle should start from customer demand rather than from items already available from a provider. Lean is an end-to-end value stream that delivers competitiveness by creating a balanced flow of value adding processes in addition to avoidance of waste. Lean grew through revolution and evolution (Bicheno, 2004).

Due to continuously adapting to satisfy the consumers demand, providers throughout the globe are attempting to implement Lean. Some organisations have been successful in improving the output, whereas others failed to implement lean or incurred losses in the process of attempting it (Emiliani and Stec, 2005). To survive in the dynamic market organisations are even trying to adopt outsourcing as a short-term strategy. Most organisations agreed that the decision to outsource was made even before the tender document and quotations were collated and a particular provider was selected. Outsourcing decisions are based on non-financial metrics and the study of the impact of outsourcing on firms' performance relies on perceived results rather than direct measures. Mostly respondents are middle-level managers with limited information that results in incomplete quantitative indicators of performance confirmed across a statistically representative sample of firms. Financial data analysis on outsourcing provides a limited contribution. Due to risk in outsourcing, the companies are cancelling, renegotiating their agreements or hiring their own staff for in-house activities as American Management Association reported that the outsourcing outcomes had failed to meet expectations (Jiang, 2006). Outsourcing process can be improved if it is managed effectively. The author of 'The offshoring Craze (2005)' mentioned that many executives and analysts fear that many firms are unwisely jumping motivated by the promise of the cheap labour. Due to hidden costs, ineffective management and lack of communication the potential benefits of the outsourcing are often lost. All these weaknesses, however, can turn into strengths by integrating the Lean system with outsourcing and developing an optimised framework. This will be a new approach with a more general practical framework to integrate and implement Lean Outsourcing in

organisations practicing or in adopting outsourcing. In this paper an attempt has been made to develop a framework for lean Outsourcing.

2. A Model/Framework for lean Outsourcing:

The proposed conceptual model of Lean Outsourcing comprehensively incorporated the essential strategies and techniques that are responsible for improving the outcome and can be expressed as a function of a number of variable factors that influence it thus:

Lean Outsourcing = Function (Education & Training, Employee Empowerment, Performance Measurement, Top Management Commitment, Communication, Supplier Relationship Management, Logistics Management & Control, Cost Accounting, External Elements, Continuous Improvement...)

2.1. Education & Training:

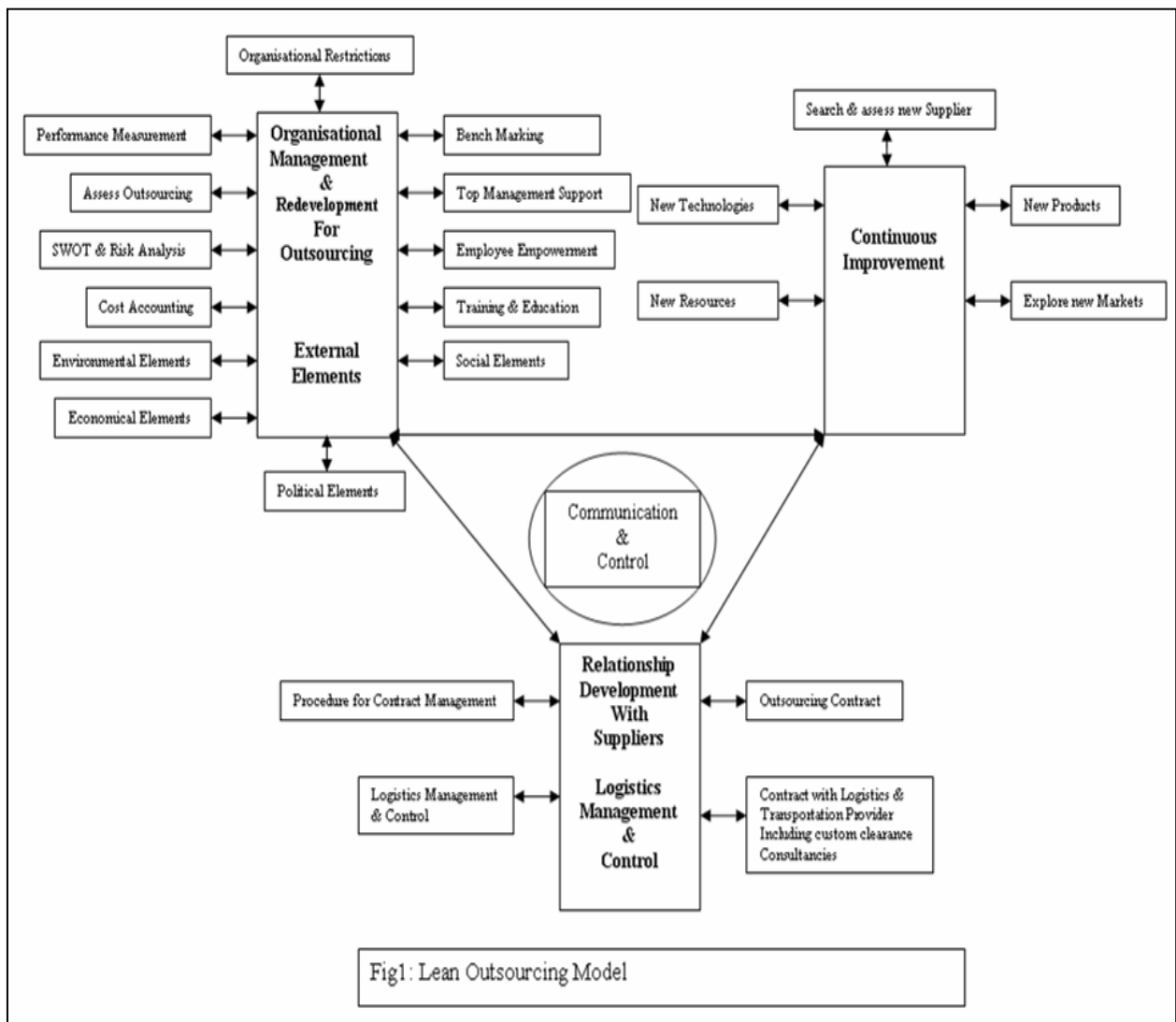
Since the industrial revolution, the organisations have practiced various functional systems and philosophies to achieve competitive advantages and to solve the problems faced from market survey to the product launch in the market. For example, the Ford Motor Company achieved success by the introduction of a more precise measurement system for components, simplifying the design for manufacture and developing skilled labour. The philosophy of the Lean system is the continuous improvement and reduction in waste. Every individual involved is multi-skilled improving the process while performing his/her own job. To achieve better results, employees should be trained in practicing the new approach. Education and training play a crucial role in integrating and practicing Lean

Outsourcing. Education enhances the skills and motivation in obtaining teamwork. In a survey of training needs of the future, it was concluded that previous training skills and procedures had to be revised to understanding systems and social skills as the need shifted to more conceptual awareness of

what a person can do rather than only he/she knows (Downs, 1998).

The employees should be trained about the concepts, philosophies and techniques of the Lean system and outsourcing as individuals and how they can be integrated.

Fig 1: Lean Outsourcing model



This could be achieved via conducting workshops, higher education and specialised conferences. Where-ever necessary external experts and consultants should be hired to assess the

organisation's suitability for outsourcing and then develop an educational programme at all levels of the organisation. Lean Outsourcing stresses continuously improving the educational and training

programme in order to fulfil the business needs of the organisation. The educational programme should cover all elements that influence the outsourcing ranging from external elements to contract management.

2.2. Employee Empowerment:

Successfully Integrating Lean Outsourcing demands a motivated workforce. Motivating employees' entails open communication, involvement in strategic decisions, a reward scheme and offering shares in the company to give a sense of ownership. Empowerment is a state of mind that can be created in workers by giving them a control and power together with business information including the strategic context in which the job is performed and accountability for performance outcomes, thereby motivating them to perform the job effectively and efficiently. Employee empowerment is achieved by establishing an effective information system; self managed teams, training and reward incentive schemes.

The Lean Outsourcing model strategy encourages training employees in new skills instead of replacing them. This enhances employee empowerment due to increase in a sense of security.

2.3. Performance Measurement:

Financial and operational performance measurement matrices are commonly employed to measure the performance of concepts or technologies. Strategic and tactical level performance measures are also used to make decisions. Some companies are employing non-financial performance measures such as cycle time, time to reach market, set-up time, flexibility, quality, inventory level and output rate. The feasibility study to integrate the Lean

system with Outsourcing is only part of the evaluation process. Lean Outsourcing has usually been justified by the financial criteria. The indirect benefits such as motivation of employees, team working, innovation and flexibility should also be considered in the evaluation process of Lean Outsourcing. The advantages and disadvantages, however, should be analysed for performance measurement. There may be a loss of profit and additional investments in training the workers and new software needing development to educate and train workers and in streamlining the Lean Outsourcing to make it compatible with the organisations' objectives.

Lean Outsourcing demands continuously updating the performance measurement system to cope with the changing demands of the dynamic market. The effectiveness of the outsourcing process should be measured by comparison with the predicted results of instead performing the activities internally. The impact of any newly emerged external supplier should also be considered.

2.4. Top Management Commitment:

To integrate and implement Lean Outsourcing, it is important that top management should provide moral, technical and financial support. A clear strategy and programme should be formulated. Quality of leadership and guidance originate from such well-committed and dedicated top management. The effectiveness of leadership depends on authority and responsibility and position in the organisation. Top management should be sufficiently informed about the philosophy of the Lean Outsourcing to be convinced that improved competitiveness will result. Senior managers should be encouraged to visit other countries and

attend conferences and workshops on outsourcing to understand the leadership responsibilities required.

Top management should be involved in all outsourcing decisions. As Lean Outsourcing is relatively new, for most organisations it is important that pressure is exerted on top management to take a keen interest in it and include it in their corporate strategy.

2.5. Communication:

Effective communication plays a vital role in implementing Lean Outsourcing. Advancement in information technology and communication media is aiding this process with education and training of the workers. Further advances in computer applications such as demand and forecast analysis, order placement and shipment tracking (logistics) play a vital role in implementing lean outsourcing. The distance convergence brought about by internet and video conferencing have improved communication. Employees become more effective team players through video conferencing and internet communication. Improved communication by such means between various functional areas enhances the effectiveness of outsourcing and hence productivity. Effective communication can be used to integrate elements between suppliers and the organisation to reduce the lead-time at various places in manufacturing organisation.

The contract should be agreed such that the fluctuations in the market demand are automatically conveyed to the suppliers. As an outcome of effective communication suppliers should know when, where and how market needs should be satisfied in order to encourage a pull system. By effective communication an external

supplier integrates as a part of the organisation and results in minimising the loss due to over or under production.

2.6. Cost Accounting:

In outsourcing final cost is a function of manufacturing cost, logistics cost, taxation (if applicable), Storage expenses and outsourcing management expenses. Lean outsourcing requires constant cost updating and therefore a cost monitoring system must be introduced that will act as a safety check against loss and profit.

2.7. Organisational Restrictions:

The authors propose that the organisational structure for Lean Outsourcing practice be based on a matrix that brings the key people from various functional areas together, it being born in mind that the adoption of the outsourcing is the responsibility of everyone in the organisation. Functional departments such as accounting and finance would continuously assess the outsourcing and the in-house production, comparing the investment with the benefits. The proposed matrix organisation develops a smooth flow of information and an open communication between all the participants. In this way, the employees are made aware and given, the necessary authority to perform effectively. Lean Outsourcing should be acceptable throughout the organisation: Ultimately, the proposal is acceptable if the top management approves it as part of the business strategy. While Lean Outsourcing embodies the dynamic feature of constant improvement, it must be compatible with the restrictions imposed by finite resources in the organisation.

A factor that must be taken into account is the possibility of barriers created by the cultural backgrounds of all the people

involved in the organisation. To minimise these barriers, it is essential for the management strategy to be to include psychological factors if necessary providing training in psychology for managers, which will ultimately result in improved output.

2.8. Relationship with supplier:

Outsourcing process starts with the supplier's selection. The contract must include minute detail and is endorsed with original signatures. All participants must agree on the contract management procedure and the service level agreement. In order to meet the dynamic market demand, the contractual business relationship between the participants has to be flexible enough to be adoptable to the changes without any penalties. The agreements should be renegotiable or amendable according to the participants need with prior arrangements. In the lean outsourcing environment, the continuous improvement includes relationship with the supplier.

2.9. Logistics control:

For efficiency and cost effectiveness, contracts are drawn with the logistics and transportation provider. A procedure is agreed to select the appropriate means of transportation, whether via air or sea depending on the product and the delivery dates. The logistics management procedure is set up with the logistics provider's agreement, all participants understanding the requirements and the constraints of the business.

In the Lean environment all participants work as a team, continuously improving the process to survive in the competitive market.

2.10. External elements:

The external elements are those factors upon which the organisation and the participants have no control. The external elements like social, political, environmental and economical factors do effect the decisions needed to develop and amend strategies. As these external elements change with time and circumstances, organisations strategies to improve their approach must be adoptable.

2.11. Strengths, Weaknesses, Opportunities and Threat analysis & Risk analysis:

In past it was thought that once an organisation has carried out SWOT (Strengths, Weaknesses, Opportunities, and Threats) and Risk analyses for a certain function, this was sufficient to hold until its phase out stage. In the lean environment, however, it is recommended to carry out these analyses periodically along with the continuous improvement cycle of the business. This is essential for providing real information for the management to improve their strategic business decisions.

2.12. Continuous Improvement:

Lean outsourcing entails continuously improving processes and functions in all aspects and attributes. The organisation should also keep on searching for new technologies, resources and suppliers with a view to new or improved products or services in order to gain and maintain a competitive advantage in the market. In order to improve the organisation image, selection criteria such as cost, reliability to deliver, quality, performance and versatility should be addressed, particularly taking into

account any changing demands from the customers.

3. Concluding:

In this paper an attempt has been made to integrate the Lean system with outsourcing and to develop a framework for the implementing of Lean Outsourcing. Major factors that facilitate an organisation to integrate and practice Lean outsourcing are education and training, team working, employee empowerment and suppliers network. Last but not least, management styles sensitive to cultural based information and barriers is an essential component in ensuring the ultimate success of Lean Outsourcing.

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